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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,004	03/30/2004	Toshio Hanada	H6808.0051/P051	2652
24998	7590	04/11/2007		
DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			EXAMINER VATHYAM, SUREKHA	
			ART UNIT	PAPER NUMBER
			1753	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/11/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/812,004

Applicant(s)

HANADA ET AL.

Examiner

Surekha Vathyam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/30/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "capillary array 1" (page 7, paragraph beginning with "Fig. 2", line 3), "window unit 16" (page 8, paragraph beginning with "The capillary", line 3), "capillary head 17" (page 8, paragraph beginning with "The capillary", line 6) and "aperture 29" (page 9, line 7).
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "23" (see figs. 5 and 6).
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "9" has been used to designate both "pump unit" (fig. 2 and page 8, line 2) and "detection window" (fig. 3).
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Capillary Array Load Header.

### ***Claim Objections***

7. Claims 1 and 5 are objected to because of the following informalities: Line 6 of claim 1 and line 7 of claim 5 each have the term "capillarys" which should be replaced with - - capillaries- -. Line 13 of claim 1 and line 14 of claim 5 each have the phrase "holder fixed the tubular electrodes" which should be changed to - -holder fixing the tubular electrodes - -. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 – 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kernan et al. (US 5,885,430).

Regarding claim 1, Kernan ('430) discloses a capillary array (see figs. 1, 2A and 2B) comprising; a plurality of capillaries (148) for holding a separation medium for separating a sample (column 1, lines 28 – 30 and column 3, lines 2 – 5); a detecting portion (46, 130) for maintaining alignment of the capillaries (column 4, lines 10 – 15); a capillary head (36, 92) for bundling and holding capillaries to one end of the capillaries (column 5, lines 3 – 11); a load header (34, 88) provided at sample injection end portions of the capillaries, comprising; tubular electrodes (140) to allow insertion of sample injection end portions (150) of capillaries (148); a connection plate (172) electrically connected with the tubular electrodes (see fig. 3B); an insulated (column 4, line 65 – column 5, line 2) holder (162) fixing the tubular electrodes, and; a cover (168) allocated at the insulated holder for insulating the connection plate; wherein the connection plate, the insulated holder and the cover are substantially closely arranged without gaps among these elements (column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 2, Kernan ('430) discloses the capillary array wherein a filling material (154) is applied to a gap between the holder and connection plate of the load header and/or to a gap between the connection plate and cover (column 6, lines 24 – 31 and column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 3, Kernan ('430) discloses the capillary array wherein the filling material has higher heat conductance than the air (column 6, lines 24 – 31 and column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 4, Kernan ('430) discloses the capillary array wherein a conductive resin is substituted for the connection plate within the load header to electrically connect the tubular electrodes with each other and the holder, cover and tubular electrodes are closely arranged without allowing substantial formation of gaps (column 6, lines 32 – 37; column 6, line 51 – column 7, line 17 and column 7, lines 34 – 47).

Regarding claim 5, Kernan ('430) discloses an electrophoresis apparatus (column 1, lines 6 – 7) comprising; a capillary array (see figs. 1, 2A and 2B) comprising; a plurality of capillaries (148) for holding a separation medium (column 1, lines 28 – 30 and column 3, lines 2 – 5) for separating a fluorescence labeled sample (column 4, lines 21 – 22 and column 4, lines 24 – 30); a detecting portion (46, 130) for maintaining alignment of the capillaries (column 4, lines 10 – 15); a capillary head (36, 92) for bundling and holding capillaries to one end of the capillaries (column 5, lines 3 – 11); a load header (34, 88) provided at sample injection end portions of the capillaries, comprising; tubular electrodes (140) to allow insertion of sample injection end portions (150) of capillaries (148); a connection plate (172) electrically connected with the tubular electrodes (see fig. 3B); an insulated (column 4, line 65 – column 5, line 2) holder (162) fixing the tubular electrodes, and; a cover (168) allocated at the insulated holder for

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insulating the connection plate; an optical unit (52, 54, 56, 58, 60) for irradiating a light to the detecting portion (see fig. 1 and column 4, lines 24 – 30), and detecting a light from the fluorescence labeled sample (see fig. 1 and column 4, lines 24 – 30); a buffer container (62, 64) capable of soaking the sample injecting end portions of capillaries and the tubular electrodes in a buffer (column 4, lines 31 – 51), and; a power supply (72) capable of applying a voltage to an electricity passage from the connection plate to the detecting portion via the sample injection end portion and the buffer (column 4, lines 52 – 62); wherein the connection plate, the insulated holder and the cover are substantially closely arranged without gaps among these elements (column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 6, Kernan ('430) discloses the electrophoresis apparatus wherein a filling material (154) is applied to a gap between the holder and connection plate of the load header and/or to a gap between the connection plate and cover (column 6, lines 24 – 31 and column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 7, Kernan ('430) discloses the electrophoresis apparatus wherein the filling material has higher heat conductance than the air (column 6, lines 24 – 31 and column 6, lines 42 – 50 and column 7, lines 18 – 26).

Regarding claim 8, Kernan ('430) discloses the electrophoresis apparatus wherein a conductive resin is substituted for the connection plate within the load header to electrically connect the tubular electrodes with each other and the holder, cover and tubular electrodes are closely arranged without allowing substantial formation of gaps

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(column 6, lines 32 – 37; column 6, line 51 – column 7, line 17 and column 7, lines 34 – 47).

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1 – 8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 18 and 19 of copending Application No. 10/732221. Specifically, instant claims 1 – 3 are rejected as being unpatentable over claim 1, instant claim 4 over claim 2, instant claims 5 – 7 over claim 18 and instant claim 8 over claim 19. Although the conflicting claims are not identical, they are not patentably distinct from each other because the indicated claims



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of co-pending Application No. 10/732221 include all the limitations of the corresponding indicated instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kasai et al. (US 6,878,256) discloses a capillary array comprising a load header with tubular electrodes.

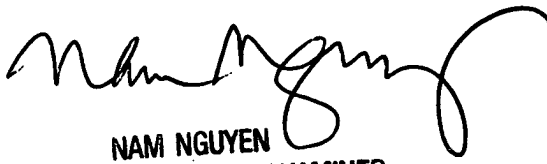
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Surekha Vathyam whose telephone number is 571-272-2682. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SV  
April 9, 2007



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